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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,113	03/03/2004	Philip G. Morton	7835	3896

7590 11/10/2008

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EXAMINER	
KWIECINSKI, RYAN D	

ART UNIT	PAPER NUMBER
3635	

MAIL DATE	DELIVERY MODE
11/10/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/792,113	MORTON, PHILIP G.	
	Examiner	Art Unit	
	RYAN D. KWIECINSKI	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,4,10,15-22,24,26 and 28-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *15-20,22 and 26* is/are allowed.

6)☒ Claim(s) *3,4,10,21,24 and 28-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by US 2002/0189743 A1 to Hornung et al.

Claim 21:

Hornung et al. disclose a window assembly comprising a rectangular outer sash frame (large outer sash Fig. 18) including a set of elongated sash frame members of extruded rigid plastics material (Page 3, Paragraph [0055], lines 1-4) with said sash frame members rigidly connected at corner portions (Fig.11; shows a square frame unit) of said sash frame, a set of parallel spaced rectangular inner and outer glass panels (102,106, Fig.18) surrounded by said outer sash frame, said sash frame members including flange portions (110, Fig.18) projecting laterally inwardly and overlapping a peripheral edge portion (140; lower portion of 102) of said outer glass panel, a rectangular inner sub-sash frame (162 b, c, or, d, Fig. 23, 24, or 25) disposed within said outer sash frame and including elongated sub-sash frame members of extruded rigid plastics material (Page 7, Paragraph [0091]), said sub-sash frame members including laterally inwardly projecting flange portions (the portion of the spacer parallel

with 110) overlapping a peripheral edge portion of at least one of said glass panels, a bonding material (Paragraph [0093], lines 5-6 and 19-20) securing said flange portions of said sub-sash frame members to said peripheral edge portion of said one glass panel, a set of elongated glazing members (108, Fig.18) of extruded plastics material, said glazing members including laterally inwardly projecting flange portions (portions of 108 parallel to 110, Fig.18) overlapping a peripheral edge portion of said inner glass panel, said glazing members including retaining portions (bottom snap fit portion of 108, Fig.18) engaging said outer sash frame, each of said sub-sash frame members including a base portion (bottom member perpendicular to 110, Fig. 23, 24, or 25) integrally connected to a corresponding said flange portion, and said base portion has generally an H-shape cross-sectional (frame members specifically 162c and 162d have H-shaped profile and cover the outer edges of the glass panels; Fig. 24 and 25) configuration and covers outer edge surfaces of said glass panels.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0189743 A1 to Hornung et al. in view of US 6,263,626 B1 to Gerhardt.

Claim 24:

Hornung et al. disclose a window assembly comprising a rectangular outer sash frame (large outer sash Fig. 18) including a set of elongated sash frame members of extruded rigid plastics material (Page 3, Paragraph [0055], lines 1-4) with said sash frame members rigidly connected at corner portions (Fig.11; shows a square frame unit) of said sash frame, a set of parallel spaced rectangular inner and outer glass panels (102,106, Fig.18) surrounded by said outer sash frame, said sash frame members including flange portions (110, Fig.18) projecting laterally inwardly and overlapping a peripheral edge portion (140; lower portion of 102) of said outer glass panel, a rectangular inner sub-sash frame (162 b, c, or, d, Fig. 23, 24, or 25) disposed within said outer sash frame and including elongated sub-sash frame members of extruded rigid plastics material (Page 7, Paragraph [0091]), a set of elongated glazing members (108, Fig.18) of extruded plastics material, said glazing members including laterally inwardly projecting flange portions (portions of 108 parallel with 110, Fig.18) overlapping a peripheral edge portion of said inner glass panel, said glazing members including retaining portions (bottom snap fit portion of 108, Fig.18) engaging said outer sash frame.

Hornung et al. do not disclose each of said sub-sash frame members including integrally connected and parallel spaced longitudinally extending wall portions projecting laterally inwardly between said edge portions of said glass panels and bonded to said edge portions of both said glass panes.

Gerhardt discloses each of said sub-sash frame members (the frame member between the panes of glass, Fig.4) including integrally connected and parallel spaced longitudinally extending wall portions (both of the wall portions which extend vertically in Fig.4 supporting the inside surfaces of the glass panes) projecting laterally inwardly between said edge portions of said glass panels and bonded (double glazed panels have a spacer/sub-sash frame that is bonded to the panes in order to provide stability and also to prevent moisture and dirt from entering the double glazed unit) to said edge portions of both said glass panes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the sub-sash members of Hornung et al. with the parallel longitudinally extending wall portions in order to secure the panes of glass in the proper position with the proper spacing around the periphery of the glass. The walls provide a securing surface for the panes of glass to ensure the proper placement of the panes and reduce forces and stresses applied to the glass around the periphery of the window assembly.

Claim 10:

Hornung et al. in view of Gerhardt disclose the window assembly of claim 24, Hornung et al. also disclose the base portion of the sub-sash frame includes a generally H-shaped cross-sectional configuration (162c and 162d, Fig. 24 and 25).

Claims 28 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0189743 A1 to Hornung et al. in view of US 2003/0070371 A1 to Kobrehel.

Claim 28:

Hornung et al. disclose a window assembly comprising a rectangular outer sash frame (large outer sash Fig. 18) including a set of elongated sash frame members of extruded rigid plastics material (Page 3, Paragraph [0055], lines 1-4) with said sash frame members rigidly connected at corner portions (Fig.11; shows a square frame unit) of said sash frame, a set of parallel spaced rectangular inner and outer glass panels (102,106, Fig.18) surrounded by said outer sash frame, said sash frame members including flange portions (110, Fig.18) projecting laterally inwardly and overlapping a peripheral edge portion (140; lower portion of 102) of said outer glass panel, a rectangular inner sub-sash frame (162 b, c, or, d, Fig. 23, 24, or 25) disposed within said outer sash frame and including elongated sub-sash frame members of extruded rigid plastics material (Page 7, Paragraph [0091]), said sub-sash frame members including laterally inwardly projecting flange portions (the portion of the spacer parallel with 110) overlapping a peripheral edge portion of at least one of said glass panels, a bonding material (Paragraph [0093], lines 5-6 and 19-20) securing said flange portions of said sub-sash frame members to said peripheral edge portion of said one glass panel, a set of elongated glazing members (108, Fig.18) of extruded plastics material, said glazing members including laterally inwardly projecting flange portions (portions of

108 parallel to 110, Fig.18) overlapping a peripheral edge portion of said inner glass panel, said glazing members including retaining portions (bottom snap fit portion of 108, Fig.18) engaging said outer sash frame, each of said sub-sash frame members including a base portion closely surrounding and covering peripheral edge surfaces of said glass panels (162c and 162d, Fig.24 and 25).

Hornung et al. does not disclose wherein said sash frame members and said sub-sash frame members have longitudinally extending interfitting portions limiting lateral movement of said sub-sash frame within said sash frame.

Kobrehel discloses wherein said sash frame members (4, Fig.2) and said sub-sash frame members (16,fig.2) have longitudinally extending interfitting portions (18 has flanges that interfit with the longitudinally extending ribs of the frame 4) limiting lateral movement of said sub-sash frame within said sash frame.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the sash frame members and the sub-sash members with interfitting portions to ensure the multiple frame members of Hornung et al. are properly fit together. The interfitting parts will also more firmly secure the frame members together as well as prevent the outer frame members from moving away from the sub-sash members.

Claim 3:

Hornung et al. in view of Kobrehel disclose the window assembly of claim 28, Kobrehel also discloses wherein sub-sash frame members are rigidly connected at corner portions of said sub-sash frame (Page 4, Paragraph [0037]).

Claim 4:

Hornung et al. in view of Kobrehel disclose the window assembly of claim 28, Kobrehel discloses wherein the sub-sash frame members are mitered (Paragraph [0037]) and also connected via a plurality of different processes (Paragraph [0037]) but does not specifically disclose welding.

Hornung et al. discloses the process of welding plastic materials (Page 6, Paragraph [0082]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the process of welding to secure the mitered corners of the sub-sash frame. Welding plastic materials is notoriously well known in the art.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0189743 A1 to Hornung et al. in view of US 5,687,518 to Endo et al.

Claim 29:

Hornung et al. disclose a window assembly comprising a rectangular outer sash frame (large outer sash Fig. 18) including a set of elongated sash frame members of extruded rigid plastics material (Page 3, Paragraph [0055], lines 1-4) with said sash

frame members rigidly connected at corner portions (Fig.11; shows a square frame unit) of said sash frame, a set of parallel spaced rectangular inner and outer glass panels (102,106, Fig.18) surrounded by said outer sash frame, said sash frame members including flange portions (110, Fig.18) projecting laterally inwardly and overlapping a peripheral edge portion (140; lower portion of 102) of said outer glass panel, a rectangular inner sub-sash frame (162 b, c, or, d, Fig. 23, 24, or 25) disposed within said outer sash frame and including elongated sub-sash frame members of extruded rigid plastics material (Page 7, Paragraph [0091]), said sub-sash frame members including laterally inwardly projecting flange portions (the portion of the spacer parallel with 110) overlapping a peripheral edge portion of at least one of said glass panels, a bonding material (Paragraph [0093], lines 5-6 and 19-20) securing said flange portions of said sub-sash frame members to said peripheral edge portion of said one glass panel, a set of elongated glazing members (108, Fig.18) of extruded plastics material, said glazing members including laterally inwardly projecting flange portions (portions of 108 parallel to 110, Fig.18) overlapping a peripheral edge portion of said inner glass panel, said glazing members including retaining portions (bottom snap fit portion of 108, Fig.18) engaging said outer sash frame, each of said sub-sash frame members including a base portion closely surrounding and covering peripheral edge surfaces of said glass panels (162c and 162d, Fig.24 and 25).

Hornung et al. does not disclose a seal connecting said flange portions of said outer sash frame members to said outer glass panel.

Endo et al. discloses a seal (42, Fig.3) connecting said flange portions of said outer sash frame members to said outer glass panel (33, Fig.3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the outer frame members of Hornung et al. with a seal connecting the flange to the outer glass panel. Providing window frames with seals is notoriously well known in the art and would provide a barrier in the window system of Hornung to prevent moisture and dirt from entering the window assembly of Hornung et al.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,687,518 to Endo et al. in view of US 2002/0189743 A1 to Hornung et al.

Claim 30:

Endo et al. discloses A window assembly comprising a rectangular outer sash frame (4a, Fig.3) including a set of elongated sash frame members (Fig.5c) comprising rigid plastics material (Column 3, lines 15-20) with said sash frame members rigidly connected at corner portions (Column 5, lines 40-45) of said sash frame, a set of parallel spaced rectangular inner and outer glass panels (32,33, Fig.3) surrounded by said outer sash frame, said sash frame members of said outer sash frame including integral flange portions (upper portions of 4a, overlapping glass 33, Fig.3) projecting laterally inwardly and overlapping a peripheral edge portion of said outer glass panel, a seal (42) connecting said flange portions of said outer sash frame members to said

outer glass panel, a rectangular inner sub-sash frame (36) disposed within said outer sash frame and including elongated sub-sash frame members (surrounds panes), said sub-sash frame members including laterally inwardly projecting integral flange portions (vertical portions of 36, Fig.3) overlapping a peripheral edge portion of said outer glass panel, a set of removable elongated glazing members (38, Fig.3), said glazing members including laterally inwardly projecting flange portions (vertical portions of 38 overlapping the inner glass 32) overlapping a peripheral edge portion of said inner glass panel, said glazing members including retaining portions (snap portion at the bottom of 38) engaging said outer sash frame, a rectangular spacer frame (34) disposed between said peripheral edge portions of said glass panels, and said sub-sash frame surrounds said outer edge surfaces of said glass panels (36, Fig.3).

Endo et al. does not specifically disclose that the sub-sash frame (36) is formed from plastic material nor do they disclose specifically that the glazing elements are formed from plastics. Endo et al. also does not disclose a bonding material securing said flange portions of said sub-sash frame members to the glass or a bonding material surrounding said spacer frame.

Hornung et al. discloses a window assembly formed from rigid plastic materials (Paragraph [0055]; Paragraph [0091]) including the outer frame, the sub-sash frame, and the glazing elements. Hornung et al. also discloses backfilling the area of the spacer frame/sub-sash frame with bonding material (Paragraph [0093], lines 5-6 and 18-19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the entire window assembly from rigid plastics material. The plastics material will provide for a solid, secure window assembly and will also prevent rotting and decay of the window assembly. Plastic materials are notoriously well known for the use of window frames due to their excellent strength, durability, and resistance to the elements and temperatures.

It also would have been obvious to have secured the spacer frame to the glass panes with a bonding material as well as the sub-sash frame to the glass panes with a bonding material. Securing both the sub-sash frame and the spacer frame to the glass panes will provide a very secure window assembly as well as seal the double glazed panes of the window assembly. The binding of the frame members to the glass panes will also ensure the glass panes stay in the desired location and prevent and part of the window assembly from moving apart.

Allowable Subject Matter

Claims 15-20, 22, and 26 allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The combination of an outer frame member, a sub-sash member, and glazing elements interacting with one another, is not found in the prior art. Specifically said glazing members include retaining portions engaging the outer sash frame and the

glazing members also including spring-like flange portions engaging the base portions of the sub-sash members.

Response to Arguments

Applicant's arguments with respect to claims 3-4, 10, 21, 2, and 28-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN D. KWIECINSKI whose telephone number is (571)272-5160. The examiner can normally be reached on Monday - Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571)272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./
Supervisory Patent Examiner, Art Unit 3635

RDK

/Ryan D Kwiecinski/
Examiner, Art Unit 3635